

REMARKS

Reconsideration and allowance are respectfully requested.

Claims 1-7 and 10-17 stand rejected as allegedly being anticipated by Gonzales (US 5,488,688). This rejection is respectfully traversed.

To establish that a claim is anticipated, the Examiner must point out where each and every limitation in the claim is found in a single prior art reference. *Scripps Clinic & Research Found. v. Genentec, Inc.*, 927 F.2d 1565 (Fed. Cir. 1991). Every limitation contained in the claims must be present in the reference, and if even one limitation is missing from the reference, then it does not anticipate the claim. *Kloster Speedsteel AB v. Crucible, Inc.*, 793 F.2d 1565 (Fed. Cir. 1986). Gonzales fails to satisfy this rigorous standard.

Gonzales describes a trace function that can operate in two modes. In the first mode, which is known as normal diagnostic mode, the trace function and the CPU are linked together so that the CPU is halted whenever the trace function (i.e., the FIFO) is halted. The trace function is halted in response to an event condition. A user can then examine the contents of the FIFO to determine the flow of software instructions that were executed prior to the event. In the second mode, called a FIFO halt mode, the CPU is not halted when the FIFO is halted to enable real time debug of the CPU. The second mode is used with debugging systems that require real time functionality, e.g., debugging a Hard Disk Drive controller. While the trace function is stopped to allow the debugger to access information from the FIFO, the CPU keeps on running its application. Halting the FIFO could be viewed as “suppressing the capture of diagnostic data.” Whether the FIFO is halted and the CPU continues to run depends on bits in the control register of the controller. See col. 4, lines 30 – 38 and Table IV. The FIFO may also be halted in response to an event condition. Event conditions are listed in Table II.

The independent claims now recite that capturing of diagnostic data is allowed in the second domain when capturing of diagnostic data is suppressed in the first domain. Example support for this amendment can be found on page 3, lines 19–21 and on page 104, line 15 to page 105, line 3. In Gonzales, the capture of diagnostic data is simply suppressed when the FIFO is halted. There is no teaching in Gonzales of a processor operating two different domains. The Examiner identifies two modes in Gonzales, but not two domains. Nor does Gonzales disclose “control logic configured to control said monitoring logic in dependence on said at least one control parameter **and the domain in which said processor is operating.**” Still further, Gonzales fails “to suppress capturing of diagnostic data relating to predetermined activities of said processor **in said first domain while allowing** capturing of diagnostic data relating to predetermined activities of said processor **in said second domain.**”

Table II of Gonzales lists event conditions that stop the FIFO from capturing information on the activity of the processor. These conditions are all linked to usual requests (breakpoints, external debug request, trace request). But none is linked to the domain in which the processor is operating. Furthermore, the capturing of diagnostic data is simply stopped in Gonzales by halting the FIFO, it is not suppressed in one domain while being allowed in another.

The current application stops the monitoring logic from capturing data relating to the activities of the processor when the processor is operating in a given domain. Such a domain may be for example a secure domain or any domain where it is desirable to prevent activity of the processor to be monitored by an external debugger. The condition to suppress the capturing of data is hence related to the **domain** the processor is running in--and not just to usual debug events as in Gonzales.

The current application addresses and solves the problem of leakage of data between domains during diagnostic monitoring and thus, allows granularity of the monitoring by enabling suppression of the capture of data in one domain while allowing it in another. Gonzales is not concerned with this data leakage problem between domains, but rather allows trace data to be output from a processor while the CPU is still functioning.

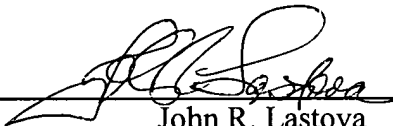
With regard to claims 2 and 11, the Examiner equates the normal diagnostic mode (CPU and FIFO halted) as the non-secure mode and the FIFO halt mode (FIFO halted and CPU running) as the secure mode. But again, there is no indication of what the Examiner considers to be the secure domain and the non-secure domain. The claimed domains are not disclosed.

Lacking multiple features recited in the claims, the anticipation rejection is in error and should be withdrawn. The application is in condition for allowance.

Respectfully submitted,

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